

10/755,545

Sequence alignment B

SEQ ID NO:2

AY01098

ID AY01098 standard; protein; 263 AA.

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AC AY01098;

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DT 15-JUN-2007 (revised)

DT 11-JUN-1999 (first entry)

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DE Human follistatin-3 protein sequence.

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KW Follistatin-3; human; cancer; cellular growth disorder; liver cirrhosis;
KW differentiation disorder; reproductive system disorder; male sterility;
KW activin-induced differentiation inhibitor; gonadotroph adenoma; hepatoma;
KW osteosarcoma; idiopathic pulmonary fibrosis; pulmonary fibrosis; tumour;
KW fibrotic disorder; osteoarthritis; haematopoiesis; infectious disease;
KW sepsis; cancer; silicosis; sarcoidosis; endotoxic shock; therapy;
KW BOND_P2; follistatin-like 3 glycoprotein; follistatin-related protein;
KW follistatin-like 3 glycoprotein [Homo sapiens]; FSTL3; FLRG; FSRP;
KW follistatin-like 3 glycoprotein precursor;
KW follistatin-like 3 glycoprotein;
KW follistatin-like 3 glycoprotein precursor [Homo sapiens];
KW follistatin-like 3 (secreted glycoprotein), isoform CRA_a;
KW follistatin-like 3 (secreted glycoprotein), isoform CRA_a [Homo sapiens];
KW FSTL3 [Homo sapiens]; follistatin-like 3 (secreted glycoprotein);
KW Follistatin-like 3 (secreted glycoprotein) [Homo sapiens];
KW follistatin-related protein FLRG;
KW follistatin-related protein FLRG [Homo sapiens]; G05615; GO17106;
KW G030514; G048185; GO8151.

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OS Homo sapiens.

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PN WO9910364-A1.

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PD 04-MAR-1999.

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PP 27-AUG-1998; 98WO-US017710.

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PR 29-AUG-1997; 97US-0056248P.

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PA (HUMA-) HUMAN GENOME SCI INC.

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PI Ruben SM, Duan R;

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DR WPI; 1999-204646/17.

DR N-PSDB; AAX28124.

DR PC:NCBI; g15031701.

DR PC:SWISSPROT; O95633.

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PT New follistatin-3 polypeptides and nucleic acids - used to develop
PT products for treating e.g. cancers, male sterility, wound healing,
PT fibrotic disorders, angiogenesis and autoimmune, inflammatory and
PT infective diseases.

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PS Claim 18; Fig 1; 109pp; English.

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CC This sequence is the follistatin-3 (FS3) protein of the invention. The
CC products can be used to treat cancers and other cellular growth and
CC differentiation disorders as well as disorders of the reproductive
CC system. FS3 can be used or to treat male sterility. FS3 may also be used
CC to inhibit the activin-induced differentiation of follicular granulosa
CC cells. FS3 may be used therapeutically to regulate autocrine endothelial
CC cell activity and, as a result, induce angiogenesis. Treatment to
CC increase the expression or the presence of FS3 may be used to inhibit the
CC progression of gonadotroph adenomas, osteosarcomas, hepatomas, and other
CC tumours and cancers. FS3 may also be used to treat other fibrotic
CC disorders including liver cirrhosis, osteoarthritis and pulmonary
CC fibrosis. It may also be used to regulate haematopoiesis, and to treat

CC sepsis. Antagonists of FS3 may be used to treat a deficiency in FSH, CC oestrogen and other hormones, to prevent or inhibit or reduce the CC production of spermatozoa, to modulate gonadal androgen biosynthesis. FS3 CC antagonists may also be used to treat infectious diseases including CC silicosis, sarcoidosis, idiopathic pulmonary fibrosis by altering the CC activation state of mononuclear phagocytes, to treat idiopathic hyper- CC eosinophilic syndrome by preventing eosinophil production and activation. CC Endotoxic shock may also be treated by FS3 antagonists by preventing the CC activation of macrophages.

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CC Revised record issued on 15-JUN-2007 : Enhanced with precomputed
CC information from BOND.

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SQ Sequence 263 AA;

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Query Match      100.0%; Score 1492; DB 2; Length 263;
Best Local Similarity 100.0%; Pred. No. 3.3e-104;
Matches 263; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1 MRPGPAGPLWPLPGALAWAVGFEVSSMGSGNPAPGGVCWLQQQEATCSLVLQTDVRAE 60
PQ 2 MRPGPAGPLWPLPGALAWAVGFEVSSMGSGNPAPGGVCWLQQQEATCSLVLQTDVRAE 60

QY 61 CCASGNIDTAWSNLTHPGNKINLLGFLGLVHCLPCKDSCDGVECGPGKACRMLGGRPRCE 120

121 CARDSCSI PARLOWCGSDGATYRDECESI RAARCRCHEDLSVWYRCRCKSCEHIVCPEPQ 180

D6 121 CAPDCSGLPARLQVCGSDGATYRDECCELRAARCRGHPDL SVMYRGRCRKSC EHVVCP RPQ 180

Qy 181 SCVVDQTGSAGHCVVCRAAPCPVPSSPGQELCGNNNVTYISSCHMRQATCFLGRSIVGRHA 240
Pf 181 SCVNDQTGSAGHCVCAAPCPVPSSPGQELCGNNNVTYISSCHMRQATCFLGRSIVGRHA 240

QY 241 GSCAGTPEEPGGESAEEEEENFV 263
Dp 241 GSCAGTPEEPGGESAEEEEENFV 263